In the Specification

Please enter the enclosed substitute specification. A clean copy of the substitute specification and a marked up copy of the substitute specification are enclosed. The substitute specification contains no new matter.

In the Claims

Please amend the claims as follows. A marked-up copy of the claim amendments is attached separately.

1. (Amended) A circuit board adapted to suppress electromagnetic interference, the circuit board comprising:

an electrically conductive transmission layer defining a circuit pattern;

a ferrite powder containing medium spaced from the electrically conductive transmission layer; and

A1 an insulating layer, positioned between the transmission layer and the ferrite powder containing medium.

2. (Amended) The circuit board of claim 1, wherein the ferrite layer comprises a plurality of non-contiguous spaced apart ferrite powder containing medium regions.

3. (Amended) The circuit board of claim 1, wherein the ferrite powder containing medium is not connected to an electrically conductive material.

4. (Amended) The circuit board of claim 1, wherein the ferrite powder containing medium further comprises a paint.

5. (Amended) The circuit board of claim 1, wherein the ferrite powder containing medium further comprises an epoxy.

6. (Amended)The circuit board of claim 1, wherein the ferrite powder containing medium consists essentially of a ferrite powder.

the ferrite powder containing medium has an effective thickness of greater than about 0.0005 inches and less than about 0.06 inches has a loss factor of greater than 0.0001; and

the ferrite powder containing medium is configured to magnetically couple to an electromagnetic signal in the transmission layer where the electromagnetic signal is more than about 1 MHz and less than about 300 GHz.

9. (Amended) The circuit board of claim 1, wherein the ferrite powder has a particle size of

A2 more than about 1 micron and less than about 5 microns and has an imaginary component of a

complex permeability of more than about 100 for at least one frequency of more than about 20 MHz and less than about 1 GHz and the ferrite powder has a flux density of at least about 2000 gauss;

the ferrite powder containing medium has an effective thickness of greater than about 0.005 inches and less than about 0.01 inches;

the ferrite powder containing medium has a loss factor of greater than 0.0005; and

the ferrite powder containing medium can magnetically couple to an electromagnetic signal in the transmission layer where the electromagnetic signal is more than about 20 MHz and less than about 1 GHz.

10. (Amended) The circuit board of claim 1, further comprising a captivating layer that maintains the ferrite powder containing medium on the circuit board.

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11. (Amended) A circuit board for reducing undesired electromagnetic signals, the circuit board comprising:

an electrically conductive transmission line configured to conduct an electrical signal and an electromagnetic signal;

a ferrite powder containing medium that magnetically couples with the electromagnetic signal on the circuit board to absorb and dissipate the electromagnetic signals; and

an insulating material positioned between the electrically conductive transmission line and the ferrite powder containing medium, the insulating layer being adapted to maintain the electrical signal in the transmission line from reaching the ferrite powder containing medium while permitting transmission of the electromagnetic signals between the ferrite powder containing medium and the transmission line.

12. (Amended) A circuit board of claim 11, further comprising a captivating material that maintains the ferrite powder containing medium on the circuit board.

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14. (Amended) The circuit board of claim 11, wherein the ferrite powder containing medium comprises an adhesive that adheres the ferrite-containing medium to the circuit board.

Remarks

Objections To Drawings and Specification

As requested by the Examiner, the correction to FIG. 5 enclosed above more clearly details the ferrite layer. The substitute specification removes the number labels objected to by the Examiner as not being present in the drawings. Accordingly, the drawings and specification